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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/712,093	11/14/2000	Joyce B. Carson	27600/M209A	8765

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Grossman & Flight LLC
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EXAMINER

ROGERS, SCOTT A

ART UNIT PAPER NUMBER

2627

DATE MAILED: 10/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/712,093

Applicant(s)

CARSON, JOYCE B.

Examiner

Scott A. Rogers

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-15 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-7,9 and 11-13 is/are rejected.
- 7) ☒ Claim(s) 3,8 and 10 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. <u>2 mailed herewith</u> . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art in view of Grude et al (DE 3614646 A1). References below are to the attached English translation of the Grude et al patent document.

Referring to claim 1:

Applicant admits in the Background Art section of the specification (pages 1-2) that known attempts to calibrate an engraving machine include the steps of:

providing an engraving signal of a predetermined wave shape to the engraving machine to cause the engraving machine to produce a gravure cell having a volume;

measuring the volume of the gravure cell;

comparing the measured volume of the gravure cell to a predetermined cell volume to obtain a variance indication; and

adjusting the engraving machine in accordance with the variance indication.

What the admitted prior art lacks is the use of a non-contact optical profiler for measuring the volume of the gravure cell.

Grude et al teaches in the same field of art, use of a non-contact optical profiler, (microscope 2) which allows more precise optical measurements to be taken of the volume of the gravure cell or well (see p. 4, lines 4-5 and p. 4, line 12 to p. 6, line 12).

It would have been obvious to one of ordinary skill in the art to have provided in the admitted prior art method of calibrating a gravure engraving machine, the step of measuring the volume of the gravure cell using a non-contact optical profiler, as taught by Grude et al. Such a modification of the prior art would allow more precise optical measurements to be taken of the volume of the gravure cell or well as noted above. Furthermore, as noted by Grude et al, such optical measurements avoids the errors in calculating cell volume because of wear or damage of the engraving stylus (p. 3, lines 17-20).

Referring to claim 4:

Applicant admits in the Background Art section of the specification (page 1, lines 27-28) that the step of comparing the measured volume of the gravure cell involves comparison with a predetermined standard value.

Grude et al note that assumptions of cell volume are made relating to the shape of the engraving stylus (p. 3, lines 17-18). Therefore, It would have been obvious to one of ordinary skill in the art to have to have recognized in the combination, that such a standard value would depend upon the particular engraving stylus used. Grude et al recognize that the cell volume changes because of wear or damage of the engraving stylus (p. 3, lines 19-20). This is an obvious variance, which the combination of the admitted prior art in view of Grude et al would seek to identify and adjust for.

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Referring to claim 6:

Applicant admits in the Background Art section of the specification (page 2, lines 1-2) that non-contact optical profilers such as a vertical scanning interference microscope has previously been used to characterize cells in flexographic reproduction.

Since Grude et al teach use of a non-contact optical profiler (microscope 2), It would have been obvious to one of ordinary skill in the art to have to have recognized in the combination, that use of a known vertical scanning interference microscope would achieve the known inherent advantages associated with using interferometers for purposes of measurement.

Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art and Grude et al as applied to claim 1 above, and further in view of well known prior art.

Referring to claim 2:

The examiner takes Official Notice that tuning a resistance potentiometer to vary the predetermined wave shape in recording devices is well known in the art.

It would have been obvious to one of ordinary skill in the art to have provided in the combination of the admitted prior art and Grude above, the step of tuning a resistance potentiometer to vary the predetermined wave shape in order to adjust recording signals to the desired wave shape.

Referring to claim 5:

The examiner takes Official Notice that it is well known for a calibration procedure to be undertaken a number of times or at certain intervals during recording of information to prevent recording errors from occurring.

It would have been obvious to one of ordinary skill in the art to have performed in the combination of the admitted prior art and Grude above, the calibration procedure a number of times during the engraving procedure in order to actively adjust for variations in engraving conditions occurring during the engraving process.

Claims 7-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art in view of Grude et al as applied to claim 1 above, and further in view of Tuttle (US 4346588).

Referring to claim 7:

This claim adds to claim 1 the step of cleaning the gravure cell. The admitted prior art and Grude et al do not disclose this feature.

Tuttle discloses, in the process of determining cell depth or condition, cleaning a small area of an inking roller or cylinder having a surface provided with recesses or (see abstract).

It would have been obvious to one of ordinary skill in the art to have provided in the combination of the admitted prior art and Grude above, the step of cleaning the gravure cell in order to provide an improved testing and measuring method that is more reliable and accurate (see col. 2, lines 25-27 and col. 3, lines 28-32).

Referring to claims 9 and 11-13:

These claims depend from claim 7 and correspond directly to claims 2 and 4-6, which depend from claim 1, and are rejected for the same reasons as indicated above.

Allowable Subject Matter

Claims 3, 8, and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 14-15 are allowed. The prior art searched and of record neither anticipates nor suggests in the claimed combinations, repeating steps (b) and (c) if the volume variance is above a first threshold and adjusting the engraving machine if the average volume variance is below a second threshold.

Remarks

This is a new Non-Final Office Action which replaces the previous Non-Final Office Action mailed Oct. 7, 2004 (see agreement noted in the attached Interview Summary dated Dec. 27, 2004). The Notice of Abandonment that was mailed June 16, 2005 was an error and has been withdrawn.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott A Rogers whose telephone number is 571-272-7467. The examiner can normally be reached Monday through Friday 6:00am-2:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached at 571-272-7471.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC2600 Customer Service at 571-272-2600. Official correspondence by facsimile should be sent to 571-273-8300. The USPTO contact Center phone numbers are 800-PTO-9199.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SCOTT ROGERS
PRIMARY EXAMINER

26 September 2005